DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026279

Address: 333 Burma Road **Date Inspected:** 14-Sep-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1530 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

John Pagliero and Steve Mc ConnelWI Present: **CWI Name:** Yes No

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** N/A

Yes **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: SAS** Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 9W-PP79-W4-#2 & 4 lifting lug hole to top deck plate inside – QA randomly observed ABF welder Mike Jimenez perform 1G Shielded Metal Arc Welding (SMAW) back welding fill pass to cover pass on the infill plate to top deck plate butt joint. The welder was noted using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110A. During welding, ABF QC Fred Von Hoff was noted monitoring the welder's welding parameters. Measured working current during welding was 135 amperes on 1/8" diameter E7018H4R electrode which appears in compliance to the contract requirements. At the end of the shift, cover pass welding on the bottom side location of the two butt joints was completed and the welder has moved to another lifting lug holes at 9W-PP80-W4-#2 and 4.

At OBG 9W-PP80-W4-#2 & 4 lifting lug hole to top deck plate inside – QA randomly observed ABF welder Mike Jimenez perform 1G Shielded Metal Arc Welding (SMAW) back welding fill pass to cover pass on the infill plate to top deck plate butt joint. The welder was noted using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110A. During welding, ABF QC Fred Von Hoff was noted monitoring the welder's welding parameters. Measured working current during welding was 135 amperes on 1/8" diameter E7018H4R electrode which appears in compliance to the contract requirements. At the end of the shift, cover pass welding on the bottom side location of the two butt joints was still continuing and should remain tomorrow.

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At inner and outer east diaphragms elevation 13Meters, this QA performed root opening survey on the diaphragm plate to tower shear plate. The inner diaphragm at 13Meters was noted having a minimum root opening of 1mm and maximum root opening of 7mm which deemed acceptable to Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3080-1 that ABF plan to use. The outer diaphragm at 13Meters was noted having a minimum root opening of 0mm and maximum root opening of 11mm which suggest requiring battering to close the gap where more than 7mm was measured. Root opening measurements on other diaphragms still in progress.

At the Tower Base Elevation 0-13Meters, this QA noted two welders were not present at the site during the shift. It was later learned that the two welders were doing a welder's qualification test at the deck. All other ABF personnel working on the Tower Base were noted doing housekeeping inside and outside the tower. There was no welding performed at the Tower Base today.

Summary of Conversations:

No significant conversation ocurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer